

1. Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of capturing an image using an ultrasound system, comprising:

directing ultrasound waves from the ultrasound system to a body;
surveying the image to collect motion data;
analyzing the motion data to identify a flow in the image, the analyzing comprising segmenting the image into a flow region and a non-flow region;
scanning a limited region of the image containing the flow with a flow imaging technique; ~~and~~
distinguishing plaque from clutter when low-level echoes are present; and
adjusting a gain of an image acquisition system based on whether plaque is present or clutter is present in the image.

2. (Original) The method of claim 1, wherein surveying step comprises the step of collecting a sample of color flow data.

3. (Original) The method of claim 2, wherein surveying step comprises the step of collecting contour data.

4. (Original) The method of claim 1, wherein the analyzing step generates a motion map that identifies flow and non-flow regions.

5. (Original) The method of claim 1, wherein the flow imaging technique includes a

technique selected from the group consisting of: color flow, time domain correlation, speckle tracking, strain imaging, pulse wave Doppler, and continuous wave Doppler.

6. (Original) The method of claim 1, wherein the flow is associated with a valve in a heart.

7. (Original) The method of claim 1, wherein the flow indicates a blood vessel.

8. (Original) The method of claim 1, wherein the scanning step uses multi-line beamforming.

9. (Original) The method of claim 1, wherein the flow is periodically tracked and the limited region of the image containing the flow is automatically adjusted.

10. (Original) The method of claim 1, wherein the limited region for acquisition is a region selected from the group consisting of a 3D pie slice, a cube, an arbitrary shape, and a collection of shapes.

11. (Original) The method of claim 1, wherein the scanning step includes adjusting a set of acquisition parameters selected from the group consisting of b-mode line densities, colorflow line densities, pulse repetition frequency, and ensemble length.

12. (Currently Amended) An ultrasound system stored in a computer readable medium, comprising:

a survey system for collecting motion data from a target image;

an image acquisition system;

a segmentation system for mapping a region of flow within the image based on the motion data, the segmentation system configured to segment the image into a flow region and a non-flow region;

a flow acquisition system that automatically limits the collection of flow image data within the image to the region of flow; and

a plaque/clutter analysis system configured to distinguish between plaque and clutter and to adjust a gain of the image acquisition system based on whether plaque is present or clutter is present.

13. (Original) The ultrasound system of claim 12, wherein the motion data comprises color flow data.

14. (Original) The ultrasound system of claim 13, wherein the motion data comprises contour data.

15. (Original) The ultrasound system of claim 12, wherein the flow acquisition system collects data using an imaging technique selected from the group consisting of: color flow, time domain correlation, speckle tracking, strain imaging, pulse wave Doppler, and continuous wave Doppler.

16. (Original) The ultrasound system of claim 12, wherein the flow acquisition system uses multi-line beamforming.

17. (Original) The ultrasound system of claim 12, wherein the region of flow is periodically tracked and automatically adjusted.

18. (Original) The ultrasound system of claim 12, wherein region of flow is a region selected from the group consisting of a 3D pie slice, a cube, an arbitrary shape, and a collection of shapes.

19. (Original) The ultrasound system of claim 12, wherein the flow acquisition system includes a set of acquisition parameters selected from the group consisting of: b-mode

line densities, colorflow line densities, pulse repetition frequency, and ensemble length.

Claims 20-35. (Cancelled).